

## REMARKS

Claims 1-34 are pending in this application. Applicants note that the Examiner has indicated that claims 1-32 are pending in the PTO-326 form, however, Applicants' records do not indicate that there has been any prior Office Actions or a Restriction Requirement. If Applicants are mistaken, they would greatly appreciate it if the Examiner could indicate the disposition of claims 33 and 34.

Upon entry of this Amendment, claims 1, 16-20, and 25 will be amended, support for which can be found at page 3, line 7. The claims have been amended to even more particularly point out and distinctly claim Applicants' invention. New claim 35 has been added, support for which can be found at page 3, lines 1-2 of the specification. The Specification has been amended to reference the parent International Application. No new matter has been added by these amendments.

Reconsideration and allowance of the application respectfully are requested.

## Claim Rejections

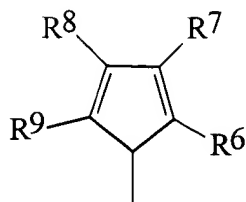
### Rejection Under 35 U.S.C. § 102

A. Response to Rejection of Claims 1-34, under 35 U.S.C. § 102(b) as being anticipated by Ewen et al (Ewen I) or alternately Ewen et al. (Ewen II).

In response to the rejection of claims 1-34 under 35 U.S.C. § 102(b) as being anticipated by the article "Polymerization Catalysts with Cyclopentadienyl Ligands Ring-Fused to Pyrrole and Thiophene Heterocycles, J. Am. Chem. Soc. 1998, 120 10786-87 of Ewen et al. ("Ewen I"), or alternately International Publication No. WO 98/22486 of Ewen et al. ("Ewen II"), Applicants respectfully submit that the references do not teach all the elements of the presently claimed invention.

Ewen I relates to polymerization catalysts with cyclopentadienyl ligands ring-fused to pyrrole and thiophene heterocycles. In particular, Ewen I describes propylene polymerization by using isopropylidene(cyclopentadienyl)(7-cyclopentadithiophene) and isopropylidene (3-tertbutyl-cyclopentadienyl)(7-cyclopentadithiophene) zirconium dichloride (compounds 2 and 1

described on page 10787). In contrast, the moiety G recited in the claims of the present invention is defined as:



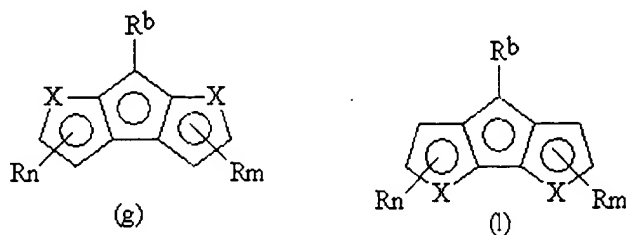
or its double bond isomers;  
wherein R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup>, which may be the same as or different from each other, are hydrogen, a C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>3</sub>-C<sub>20</sub>-cycloalkyl, C<sub>2</sub>-C<sub>20</sub>-alkenyl, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>7</sub>-C<sub>20</sub>-alkylaryl, or C<sub>7</sub>-C<sub>20</sub>-arylalkyl radical, optionally containing heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements, and at least one of substituent pairs R<sup>6</sup> and R<sup>7</sup>, and R<sup>8</sup> and R<sup>9</sup> being capable of forming a ring comprising from 3 to 8 atoms, optionally having substituents, with the proviso that R<sup>7</sup> is different from R<sup>8</sup> and when R<sup>7</sup> is a tert-butyl radical, R<sup>8</sup> is not hydrogen. The equivalent of moiety G in Ewen I's compounds 1 or 2 does not meet this limitation since they are not substituted as set forth in the claims of the present invention.

Reconsideration and withdrawal of the rejection respectfully are requested.

Ewen II relates to a very broad class of metallocene compounds having cyclopentadienyl ligands associated with one or more heterocyclic radicals. First, the compounds specifically named in the reference that are encompassed by the formulas of the present invention have been excluded in the claims.

Further, for a generic chemical formula to anticipate a claimed species covered by the formula, the species must be at once envisaged from the formula (MPEP 2131.02). With respect to Ewen II's coordinating group Y, this moiety is defined broadly as "containing a six  $\pi$  electron central radical directly coordinating Me, to which are associated one or more radicals containing at least one non-carbon atom selected from B, N, O, Al, Si, P, S, Ga, Ge, As, Se, In, Sn, Sb and Te" (page 8, lines 10-14). The reference therefore recites thirteen possible heteroatoms in addition to the two used in compositions of the present invention. Further, the only specific

configuration of Ewen's Y moiety are summarized as preferred compounds in a list of 34 compounds spanning pages 36-38. Of these preferred compounds, only compounds (g) and (l) are even similar to the compounds of the presently claimed invention.



However, even with these preferred compounds, the heteroatoms can be selected from N, P, NR<sup>g</sup>, PR<sup>g</sup>, in addition to O or S recited in the present invention (page 38, line 5); and the number and location of the substituents R<sub>n</sub> and R<sub>m</sub> in the compounds are not specifically defined.

Therefore, the reference does not teach all the elements of the presently claimed invention, since the species covered by the presently claimed invention cannot be at once envisaged by one skilled in the art. Reconsideration and withdrawal of the Rejection respectfully is requested.

**B. Response to Rejection of Claims 1-34, under 35 U.S.C. § 102(e) as being anticipated by Ewen et al (Ewen III).**

In response to the rejection of claims 1-34 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,444,833 of Ewen et al. ("Ewen III"), Applicants respectfully submit that the reference does not teach all the elements of the presently claimed invention.

The metallocenes of Ewen III are completely different than those of the present invention. The cyclopentadienyl radicals of Ewen III are fused with only one heterocyclic moiety. In contrast, the cyclopentadienyl moieties of the presently claimed invention are fused with two heterocyclic moieties. The reference therefore does not anticipate the presently claimed invention. Reconsideration and withdrawal of the Rejection respectfully is requested.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. Should the Examiner have questions or comments regarding this application or this amendment, Applicants' attorney would welcome the opportunity to discuss the case with the Examiner.

The Commissioner is hereby authorized to charge U.S. PTO Deposit Account 08-2336 in the amount of any fee required for consideration of this Amendment.

This is intended to be a complete response to the Office Action mailed March 17, 2003.

Respectfully submitted,

**ILYA E. NIFANT'EV ET AL.**

July 17, 2003  
(Date)

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I hereby certify that this correspondence is being deposited with sufficient postage thereon with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 17, 2003.

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Date of Signature